

m/049/031

**RECLAMATION SURETY ESTIMATE****Valley Asphalt, Inc.**last revision **11/18/98****Lehi Quarry**

filename: m49-31tg.wb2

**M/049/031****Utah County**

page "ESTIMATE"

Prepared by Utah State Division of Oil, Gas &amp; Mining

**-SHADED LINE ITEMS WERE REVISED 11/18/98 PER PHONE CONVERSATION w/Arjun Ram**

- This is a revised version of Valley Asphalt's estimate in the August 14, 1998 response
- This estimate is based on the reclamation plan from the response received Aug. 14, 1998
- Most equipment is skid or wheel mounted except for asphalt storage bins with reinforced concrete
- All structures & facilities to be removed or demolished; concrete foundations demolished
- Skid or wheel mounted facilities to be trucked off site
- Top soil from Berm area will be spread (assumed 2,000 ft haul distance one-way for scraper)
- Topsoil may need to be trucked in from off site borrow areas
- A minimum of 6" of topsoil to be spread in the berm area & operations area & then seeded
- A minimum of 12" of topsoil to be spread in the pit bottom area & then seeded
- Paved road entrance to be ripped & a minimum of 6" of topsoil to be spread & then seeded
- Three phases of mining have now been replaced by one phase
- Acreage: berm area 9.7, asphalt crushing & yard 16.0, excavation 95.3, road 0.57, highwall 24.0
- The highwall area (24.0 acres) will not be topsoiled or seeded - variance

**Note: actual unit costs may vary according to site conditions last unit cost update 10/12/98****-Amount of disturbed area which will receive reclamation treatments = 121.6 acres****-Estimated total disturbed area for this mine = 145.6 acres**

Activity	Quantity	Units	\$/unit	\$	Note
Safety signs, etc. (mtls & installation)	1	sum	500	500	(1)
Demolition of concrete foundations - silos	3,300	SF	6.06	19,998	(2)
Demolition of concrete foundations - fuel tanks	1,000	SF	5.05	5,050	(2a)
Equipment removal - loading & trucking	13	trips	530	6,890	(3)
Debris & equipment removal - dump fees	10	ton	50	500	(4)
Debris removal - loading trucks w/FE loader	4	hours	170	680	(5)
Demolition & debris removal - general labor	32	hours	15	480	(6)
Ripping "facilities area"	8.0	acre	581	4,648	(7)
Installing safety fencing around highwalls	5,740	LF	1.00	5,740	(8)
Ripping asphalt access road - dozer	0.6	acre	581	349	(7)
Surface drainage restoration - undocumented	1,800	LF	0.20	360	(9)
Topsoil replacement - dozer spreading	174,942	CY	0.20	34,988	(10)
Topsoil replacement - scraper haulage	174,942	CY	1.08	188,937	(11)
Fertilizing ( 100 lb/acre diammonium phosphate)	121.6	acre	90	10,944	(00)
Drill seeding (~13 lb/acre)	121.6	acre	220	26,752	(00)
General site cleanup & trash removal - yard 50%	8.0	acre	50	400	(00)
Equipment mobilization	6	equip	500	3,000	(00)
Reclamation Supervision	15	days	363	5,445	(12)
		Subtotal		315,661	
10% Contingency				31,566	
		Subtotal		\$347,227	
Escalate for 5 years at 2.24% per yr				40,671	
		Total		\$387,899	
		Rounded surety amount in yr 2003-\$		<b>\$387,900</b>	
Average cost per disturbed acre =		\$2,664			

47		Rounded surety amount in yr 2003-\$	<b>\$387,900</b>
48	Average cost per disturbed acre =	\$2,664	

<b>RECLAMATION SURETY ESTIMATE</b> <i>Valley Asphalt, Inc.</i> <i>Lehi Quarry</i> <i>M/049/031</i> <b>Prepared by Utah State Division of Oil, Gas &amp; Mining</b>			
		last revision	<u>11/18/98</u>
		filename: m49-31tg.wb2	page "ESTIMATE"
		<i>Utah County</i>	

<b>Note</b>	
(1)	DOGM lump sum assumed
(2)	Means Heavy Construction Cost Data 1998, 020-754-0440, concrete removal, floors, 6" thick, reinforced rods +20% heavy reinforce(1
(2a)	Means Heavy Construction Cost Data 1998, 020-75004440, concrete removal, floors, 6" thick, reinforced rods
(3)	DOGM estimate taken from similar operation - file M/035/012
(4)	Means 1998, 020-612-0100, bldg construction mtls
(5)	Rental Rate Blue Book 4/98, Cat 988B, 7CY, & Means 1998, Crew B-10U
(6)	DOGM assumed wage for unskilled general labor
(7)	Means 1998 & Rental Rate Blue Book 4/98: Cat D10N, U, multi shank rippers, speed 0.5 mph
(8)	DOGM general estimate for field fence, 4 strand barbwire
(7)	Means 1998 & Rental Rate Blue Book 4/98: Cat D10N, U, multi shank rippers, speed 0.5 mph
(9)	Means 1998 & Rental Rate Blue Book 4/98: Cat D10N, U, mtl 2550 lb/CY, 50 ft push, avg vol 1.0CY/LF- assumed
(10)	Means 1998 & Rental Rate Blue Book 4/98: Cat D10N, U, mtl 2550 lb/CY, 50 ft push
(11)	Means 1998 & Rental Rate Blue Book 4/98: Cat 627F P-P, mtl 2550 lb/CY, 2,000 ft haul one-way, grade +/- 4%,
(00)	DOGM general estimate - fertilizing
(00)	DOGM general estimate - drill seeding
(00)	DOGM general estimate - site cleanup & trash removal
(00)	DOGM general estimate - equipment mobilization 50 miles or less
(12)	Means 1998, 010-036-0180, project manager, minimum \$1,815/wk